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$$x^2 + 4x - 21 = 0$$

$$\begin{array}{l|l} a=1 & \Delta = b^2 - 4ac = 4^2 - 4 \cdot 1 \cdot (-21) = 16 + 84 = 100 \\ b=4 & \\ c=-21 & \\ -b=-4 & \end{array} \left\{ \begin{array}{l} \Delta > 0 \text{ δύο λύσεις} \\ X_{1,2} = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-4 \pm \sqrt{100}}{2 \cdot 1} = \frac{-4 \pm 10}{2} \end{array} \right. \begin{array}{l} \nearrow \frac{-4+10}{2} = \frac{6}{2} = 3 \\ \searrow \frac{-4-10}{2} = \frac{-14}{2} = -7 \end{array}$$

$$x^2 - 5x - 14 = 0$$

$$\begin{array}{l|l} a=1 & \Delta = b^2 - 4ac = (-5)^2 - 4 \cdot 1 \cdot (-14) = 25 + 56 = 81 \\ b=-5 & \\ c=-14 & \\ -b=+5 & \end{array} \left\{ \begin{array}{l} \Delta > 0 \text{ δύο λύσεις} \\ X_{1,2} = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{5 \pm \sqrt{81}}{2 \cdot 1} = \frac{5 \pm 9}{2} \end{array} \right. \begin{array}{l} \nearrow \frac{5+9}{2} = 7 \\ \searrow \frac{5-9}{2} = \frac{-4}{2} = -2 \end{array}$$

$$3x^2 - 2(x-1) = 2x+1 \quad \text{Πελά την μορφή } ax^2+bx+c=0$$

$$3x^2 - 2x + 2 = 2x + 1$$

$$3x^2 - 2x + 2 - 2x - 1 = 0$$

$$3x^2 - 4x + 1 = 0$$

$$\begin{array}{l|l} a=3 & \Delta = b^2 - 4ac = (-4)^2 - 4 \cdot 3 \cdot 1 = 16 - 12 = 4 \\ b=-4 & \\ c=1 & \\ -b=4 & \end{array} \left\{ \begin{array}{l} \Delta > 0 \text{ δύο λύσεις} \\ X_{1,2} = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{4 \pm \sqrt{4}}{2 \cdot 3} = \frac{4 \pm 2}{6} \end{array} \right. \begin{array}{l} \nearrow \frac{4+2}{6} = \frac{6}{6} = 1 \\ \searrow \frac{4-2}{6} = \frac{2}{6} = \frac{1}{3} \end{array}$$

$$-2w^2 + 5w - 3 = 0$$

$$\begin{array}{l|l} a=-2 & \Delta = b^2 - 4ac = 25 - 4 \cdot (-2) \cdot (-3) = 25 - 24 = 1 \\ b=5 & \\ c=-3 & \\ -b=-5 & \end{array} \left\{ \begin{array}{l} \Delta > 0 \text{ δύο λύσεις} \\ w_{1,2} = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-5 \pm \sqrt{1}}{2 \cdot (-2)} = \frac{-5 \pm 1}{-4} \end{array} \right. \begin{array}{l} \nearrow \frac{-5+1}{-4} = \frac{-4}{-4} = 1 \\ \searrow \frac{-5-1}{-4} = \frac{-6}{-4} = \frac{3}{2} \end{array}$$

Ακό 4,5 και 97